THE

QUARTERLY JOURNAL

OF

ECONOMICS

FEBRUARY, 1910

PROPOSALS FOR STRENGTHENING THE NATIONAL BANKING SYSTEM. I

SUMMARY

I. Rapid growth of banking under state laws, 202. — The prohibition of real estate loans diminishes the profits of national banks and their power to serve the community, 204. — The large amount of funds employed away from home by the banks is a serious element of weakness in our credit system, 206. — The segregation of savings deposits with power to invest them in mortgage loans would reduce the congestion of credit in New York, 210. — II. The uselessness of reserves with agents in past crises, 217. — The strain on New York has been too severe, 219. — Proposal to substitute for the present system two classes of banks, local banks and reserve agents, 223. — The latter to be established anywhere but in all cases to hold a cash reserve of 25 per cent., 224. — The cash reserves of local banks to be increased to 10 per cent., the money released by the conversion of demand into savings deposits providing the means, 227. — III. Failure to use reserves in crises, 229. — Largely due to the use of clearing house loan certificates without their original complement of a provision for equalizing reserves, 231. — Summary account of the effects of their issue on successive occasions, 236. — Equalization not unfair to any bank and should be required by law when they are issued, 240.

In the May (1909) number of this Journal the writer presented at length reasons for the view that a central bank would not fit into our system and prove an effective remedy for our financial ills. The opinion was also expressed that a number of changes less

revolutionary in character might be made which promised improvement far more certainly. Some of these changes were briefly indicated in that paper. It is my purpose, in this and in a succeeding article, to analyze the working of our banking system still further and to set forth in detail certain modifications in legislation and practice which may be expected to enable the banks to serve the community more effectively in normal times and also place them in a better position to meet emergencies. Most of the changes which will be urged are designed almost exclusively to meet crisis conditions. I shall, however, begin with a proposal the primary purpose of which is to make banking under the national law more profitable, and also more serviceable to the community, tho it will be found to have no little value as a means of strengthening the credit structure. This proposal is the establishment of true savings departments by national banks, the deposits in which shall be segregated and invested under appropriate safeguards.

I

There is abundant evidence of the urgent need of amending existing legislation if the national banks are to remain the predominant factor in our banking system. For many years credit institutions under state laws, both state banks and trust companies, have been increasing far more rapidly both in number and in volume of business.[1] A decade or more ago

[1] The following table shows the resources of the three groups of banks at successive ten-year intervals. It probably exaggerates somewhat the growth of state institutions, as the data regarding them secured by the Comptroller of the Currency have become somewhat more comprehensive in recent years.

Resources of Commercial Banks in the United States [in millions]

	1888	1898	1908
National Banks	$2731	$3978	$8714
State Banks	672	1356	4033
Trust Companies	314	942	2366

observers commonly contented themselves with the explanation that state laws lacked many provisions, the expression of sound banking principles, which were to be found in the national law. But this explanation is no longer even plausible. State banks and trust companies have steadily, and upon the whole deservedly, gained in prestige and public confidence. The discredit of a number of the latter in New York and elsewhere in 1907 served only momentarily to check their growth. Banking under state laws is certainly more profitable and is also apparently rendering a more complete and efficient service to the community than is possible under the national law. To meet this unsatisfactory situation should be the first step in legislation, if it can be accomplished without sacrificing any real element of strength in the national banking system.

Most of the restrictions in the national banking law have to do with loans, reserves, or the issue of notes. Of these the restrictions upon loans are by far the most serious impediment in competing for business with state banks and trust companies. For the banks outside the large cities this is particularly true of the provision which forbids loans upon real estate as security.

This restriction is based upon a sound banking principle, learned after much bitter experience. But the experience which led to a complete prohibition of real estate loans was gained amid the economic conditions of the first half of the last century, and the principle itself is one which is applicable only to a particular form of banking organization. While the country was in process of settlement, with an abundance of unoccupied fertile land, real estate was a security of most uncertain value. Moreover, the wild-

est of the speculative movements which preceded all our early crises were invariably in land. At present, land values are far more stable, and real estate is everywhere included among the most conservative of investments, proper for all with the one exception of commercial banks.

For banks all of whose obligations are payable upon demand, the real estate loan, quite regardless of its safety, is wisely considered unsuitable. Such loans are commonly wanted by borrowers for a considerable period of time and, therefore, they can not readily be reduced in amount even by an individual bank. In other words, they are not liquid. But the importance of this quality in all its assets disappears when a bank begins to acquire time or savings deposits, as well as those payable on demand. There is, indeed, a strong prejudice in English-speaking countries in favor of the complete division of labor among banking institutions. This view, at no time accepted in other countries, has been steadily losing ground even in Great Britain.[1] In the United States the example of the trust companies shows that a great variety of financial business can be carried on safely and profitably under a single management. Failures among them have been comparatively few in number, and it would be difficult to find a single instance of disaster which could be attributed to the variety of business carried on.

Some of the advantages which the banks would derive if they were able to lend on real estate are so evident that they require little more than mere mention. It would give them more of the most profitable kind of business, that which has its origin in the

[1] A number of the London joint stock banks have, for example, recently established foreign exchange departments.

neighborhood of the bank. The immediate return is generally greater than can be secured from the employment of funds in the money centers or in the purchase of paper from note brokers. Moreover, in fostering the growth of wealth and population in its locality a bank is laying a solid foundation for the future expansion of its own business. Finally, the ability to lend on real estate will often enable a bank to secure valuable customers who would otherwise go elsewhere. It has been the unpleasant experience of many a national banker to be obliged to refuse a loan to a would-be borrower who has nothing but real estate to offer as security and to see him enter a neighboring state bank or trust company where there was no legal obstacle to the transaction. Relations once established are pretty certain to continue even after the borrower has security which falls within the provisions of the national law.

There are then at least three distinct advantages which may be expected to follow if the national banks are permitted to lend on real estate. It would be profitable for the banks; it would be of advantage to the localities served by the banks; and, finally, it would enable the banks to compete with state institutions upon a more equal footing,[1] thus checking to some extent the relative decline of banking under the national law. All these advantages, and others to be mentioned later, can be secured with no sacrifice of safety by a simple amplification of the existing law. It is only necessary to permit the national banks to establish true savings departments, segregating the

[1] The importance of real estate to the state banking institutions is shown in the Special Report from the Banks of the United States on April 28, 1909, recently published by the National Monetary Commission. For state banks real estate loans and mortgages amounted to $414,000,000 or 12½ per cent. of total resources and for the trust companies to $377,000,000, more than 9 per cent. of their resources.

deposits, with power to invest them in mortgage loans.

Many of the national banks have already established what are termed savings departments; but they lack most of the essential characteristics of savings institutions. The banks do not have the right to refuse payment on demand; there is no check upon sudden withdrawals aside from the loss incurred by the depositor through payment of interest at half-yearly intervals. Nearly one-third of the national banks have established savings departments, the deposits in which amount to nearly $400,000,000, and almost as much more has been secured by all the banks in the national system as time deposits including time certificates of deposit. In addition to the reserve requirement, the banks must invest the funds thus secured in accordance with limitations designed to safeguard deposits the origin and purpose of which is of an entirely different character. No trouble would be experienced if discounts and short-time loans, satisfactory in quality, were to be had in every locality in sufficient quantity to absorb fully the resources of the banks. But these conditions are absent in many parts of the country, especially in those in which agricultural development is the precursor of commercial development.

There are many indications that the local demand for short-time loans is inadequate. Evasions of the law have been frequent and bankers have had the excuse that real estate is often a far better security than that provided by many of their customers whose loans are technically within its requirements. The only alternative has been for banks to employ a part of their resources permanently away from home. No one of the ways open to the banker for this employment is entirely satisfactory.

He may deposit surplus funds in the large cities and secure a beggarly 2 per cent. That this is common practice is shown by the large deposits with reserve agents in excess of the amount serving for reserve purposes. Such deposits, in the case of the country banks, on September 1, 1909, amounted to $443,000,000 of which only $249,000,000 could be counted as a part of the required reserves. In normal times these balances with city banks are a liquid resource, but in emergencies they have invariably proved of very uncertain utility. Between August 22 and December 3, 1907, for example, the country banks were able to reduce their deposits with city banks only from $410,000,000 to $347,000,000. Certainly if the purpose is to maintain themselves in a strong condition the country banks are not well-advised in keeping 10 per cent. of their resources in this form.

Many of the banks regularly hold large investments in securities. On September 1, 1909, these, not including United States bonds, amounted, in the case of the country banks, to $488,000,000, or about 12 per cent. of their total resources. Securities are more satisfactory than balances with city banks as regards the rate of return: they are also a liquid resource in normal times. In emergencies, however, they are an even more unsatisfactory resource than balances with city banks. On account of the inevitable fall in the market price of securities in times of crisis, bankers are unwilling to sacrifice them. Between August and December, 1907, for example, there was a positive increase in such holdings of nearly $22,000,000.

A third alternative is open to the banks: they may lend at a distance, either by the purchase of paper from note brokers or by means of loans on the New

York money market. If carefully selected, commercial paper purchased from note brokers is in normal times the most satisfactory investment which a bank can make away from home, both in its rate of return, in liquidness, and in its effect upon the business community. On account of the absence of other relations between borrower and lender, it is a simple matter for the bank to insist upon payment; whereas, in the case of the local borrower, a pretty constant line of credit is commonly expected and secured. It is not, however, to the advantage of the bank to employ any considerable portion of its resources either in purchases of commercial paper or in New York loans. The rate of return is commonly less than that which is secured on local loans, and no valuable permanent relations are established. Moreover, these loans at a distance, like deposits with reserve agents and security holdings, can not be depended upon in emergencies. If the city banks, and particularly those in New York, suspend payments the country bank is unable to secure the proceeds of its loans because borrowers make payment either in checks or drafts on the city banks.

The portion of the funds of the country banks employed away from home in all these various ways is certainly very great. Any legislation which would tend to increase the amount of purely local business would clearly be of advantage to the banks. That it would also be advantageous to the community is equally certain, and that it would tend to strengthen our banking system in emergencies is highly probable.

In some parts of the eastern states the available supply of capital for all purposes is in excess of local requirements. In such circumstances power to lend on real estate would not be of any particular advan-

tage to the locality. It would simply serve to enable the banks to compete upon a more equal footing with state institutions. Over a far greater part of the country the available supply of bank credit proper, that is, of short time loans, would also seem to be in excess of local needs, while the opportunities for the use of capital for more permanent objects are by no means exhausted. Here the power to lend on real estate would be of advantage both to the banks and to the community. In the most rapidly advancing sections of the country there would seem to be opportunities for the use of additional amounts of both kinds of loans. Under a highly developed system of branch banking these sections would attract banking credits from other parts of the country, and the country as a whole would thus be making the most effective possible use of this portion of its resources. But under our system of numerous independent local banks there is a very different distribution of credit. Loanable funds move without difficulty from country banks and those of the small cities to the large cities and especially to New York. But the movement goes no further; even tho the demand for loans in its neighborhood is large, the small bank can get little [1] from the money centers beyond what it has deposited or employed there, and not always all of that. In other words, credit is but imperfectly fluid, or rather, fluid in only one direction. The money centers are reservoirs for the collection from all parts of the country of funds which either temporarily or permanently can not be employed at home, but they are unsatisfactory distributing agents. The banks of the money centers are national in their power to

[1] The notes and bills rediscounted, and bills payable, of all the national banks on September 1, 1909, amounted to only $50,300,000, a little less than 1 per cent. of the total loans of the banks, and this amount has seldom been much exceeded.

attract money, while in its employment they are little more than local institutions.

To some extent, indeed, credit is widely distributed through note brokers. They perform a useful function for large borrowers whose requirements could not be met entirely by the banks of their localities. The note broker brings those whose credit is of the most unquestioned character to the cheapest market for loans; but he does not distribute funds to the localities where they are most needed.

Our practice of depositing reserves in banks of reserve and central reserve cities, and the loans made by banks away from home, do little to equalize the demand and supply of credit between different sections of the country. This failure to make the most advantageous use of available banking credit, is, however, a matter of comparatively slight importance. As a result of the widespread habit of using checks there are few parts of the country in which the lack of commercial credit is a serious obstacle to local development. Requirements for capital for prolonged use are in general met far less completely, and on this account any provision which would make possible the employment in this way of a part of the funds that must now be invested in short time loans, would serve a useful purpose.

Whether under a more perfect system of distribution the existing supply of short time credit would prove relatively excessive may be left an open question. Under our present system of numerous independent banks there is certainly a wasteful abundance of that form of capital and the disposition which is made of much of it is a serious element of weakness in the credit structure. There is normally in this country what may be termed a congestion of banking

credit in the money centers and particularly in New York. The term congestion may seem inapplicable, inasmuch as the supply of credit in the money centers is ordinarily fully utilized; but in the case of central money markets, at any rate, this is a superficial and even misleading criterion. The demand for short-time loans for purely industrial purposes is determined by the volume of business dealings which are being transacted. It cannot be stimulated materially by the banks even through the offer of low rates, tho, of course, it may be somewhat enlarged by the acceptance of inferior security. But in the money centers and particularly in New York the demand for loans is of a far more expansive nature. Speculative dealings in securities and commodities, and other financial operations, are capable of almost indefinite growth if a sufficient amount of credit can be secured. The volume of speculative dealings on the New York Stock Exchange is certainly far beyond what is needed for any useful purpose. It has been very largely created because of the enormous supply of available credit furnished by bankers under the wholly unfounded belief that call loans are always liquid.

The extraordinary amount of credit which is utilized in these and other financial dealings in New York is roughly indicated in the reports of the banks of the city. The total loans of the New York national banks on April 28, 1909, were $903,000,000; of this amount $405,500,000 were call loans secured by collateral, and $225,000,000 were time loans similarly secured.[1] In the case of the trust companies the total loans amounted to $595,0000,000, of which $251,000,-000 were call and $266,000,000 were time collateral

[1] The collateral loans of the national banks of New York City were 70 per cent. of all their loans, while those of the banks of the reserve cities, including Chicago and St. Louis, were less than 40 per cent.

loans. Finally, there were $70,000,000 of the former and $46,000,000 of the latter out of a total of $240,000,000 of loans made by the state banks in the city. For all the New York banks the total of loans was $1,738,000,000; of this amount $727,000,000, or more than 40 per cent. were call loans. Including time collateral loans of $537,000,000, the enormous aggregate of $1,264,000,000, more than 70 per cent. of all loans, is found to have been based upon stocks, bonds, and merchandise.[1] No doubt a considerable portion of these loans was obtained by borrowers for industrial uses; but, on the other hand, the loans of outside banks (Canadian as well as American) in the New York market and those of private lenders and also finance bills are not included. It would seem to be fairly certain, therefore, that collateral loans, approaching in volume those shown by the banks of the city, were made for financial and speculative purposes.

Surely it requires no argument to show that the employment of $1,000,000,000 or more in financial operations in New York is excessive and wasteful. Moreover, even if these funds are usefully employed there would seem to be something radically wrong in a banking system under which a considerable portion of them is secured from other parts of the country where there are abundant opportunities for the investment of additional capital. Not only are funds attracted to New York which would otherwise not be employed but also funds which might serve to develop local enterprises, if the banks were able to use a part of their resources in long-time loans on real estate and other security.

[1] These figures are taken from the Special Report from the Banks of the United States already referred to.

But the absorption of credit in ways which are relatively, if not absolutely, unproductive is not the only, and it may be added, not the most serious, consequence of this congestion of credit in New York. The deposit or employment by the banks of a large part of their resources at a distance is a positive element of weakness in every emergency. In order to meet the various business requirements of their customers the banks necessarily become interdependent, with various mutual obligations on both sides of the ledger. In times of crisis there is everywhere the danger, which is enormously enhanced under a system of numerous banks, that these relations will be violently sundered, dislocating the ordinary course of payments between the banks, their customers, and different parts of the country. The interdependence of the banks, tho largely the outgrowth of business convenience and necessity, is, to a very considerable extent, an unnecessary and unhealthy consequence of legislation designed with quite different objects in view.

Experience in successive crises has uniformly shown that the money centers are unable to return any considerable part of the funds deposited or employed in them by outside banks. Remedies for this unsatisfactory situation may be sought in two directions: if the local banks employed more of their resources at home the strain on the money centers in emergencies could not be so severe as it has often been in the past; on the other hand, if the banks of the money centers maintained themselves in a stronger position in normal times they could endure greater strain in times of difficulty.

The strain upon the money centers in emergencies may be diminished somewhat by a change in the

national banking law which would permit the banks to establish savings departments with power to invest savings deposits in mortgage loans. For the banks of Wisconsin, for example, to provide a portion of the funds employed on the New York Stock Exchange is certainly an uneconomic use of their resources if there are opportunities for investment at home on real security; and it is doubly undesirable because it tends to weaken the entire credit structure. The national banks of that state already hold nearly $20,000,000 in savings deposits and doubtless this amount could be largely increased. At present the deposits of the Wisconsin banks with reserve agents are nearly $5,000,000 more than are available for reserve purposes, an excess of nearly 80 per cent. Whether the Wisconsin banks are also lending to any considerable extent outside the state can not be determined, tho it is highly probable.

The extent to which real estate loans would enable the banks to dispense with the employment of funds at a distance is uncertain. It is not to be supposed that this power alone would be sufficient to remove this element of weakness. But even if it serve only to check somewhat the tendency to employ funds at a distance it would at least diminish the strain of future emergencies.

The ability of the national banks to attract savings deposits is evident. Even in New England, where the field would seem to be fully occupied by savings banks and trust companies, ninety-five of the four hundred eighty-four national banks have opened savings departments and have secured deposits amounting to more than $30,000,000. In the Western and Southern states, in which savings institutions under state laws are comparatively few, much larger

results are to be expected from a national savings bank law.

The urgent need of generally diffused facilities for savings has led many to urge the establishment of a postal savings bank system. A national savings bank law would, however, permit of a very wide extension of such facilities. If the banks were permitted to open agencies for the receipt and payment of deposits in every place in which there is no national bank and upon condition that such agencies be withdrawn upon the establishment of a bank, savings facilities could be almost as widely diffused as under a postal system. In every other respect the superior advantages of national savings banks are clear and unquestioned. The accumulation of capital is far greater in some sections of the country than in others. Presumably postal savings banks would attract depositors most largely in those sections of the country in which savings facilities are now lacking. They are just those sections in which there are the most abundant opportunities for further investment. The deposits in the postal savings banks would be invested in government bonds and possibly in the bonds of the states and of municipalities. To draw money away from Idaho or Oklahoma, for example, for such investments is unwise. It would be taking money from parts of the country where interest rates are high to place it in investments yielding a low rate of return, a rate determined by the accumulation of investment funds in the eastern money centers. Savings would be taken from parts of the country in which the rate of interest is high, simply because of the attractive facilities for savings furnished by the government.[1]

[1] The postal savings plan, now before the Senate, would tend to increase the employment of their resources by the banks away from home. Under the provisions

Can it be questioned that the development of the country will be better served by the employment of savings by the individual banks in fostering the development of their own localities ?

In formulating a national savings bank law the codes of a number of the eastern states would serve as admirable models, but the opportunity should not be lost of taking one important step forward in such legislation. The banks should be protected against their savings depositors far more completely than has been customary in the practice of state savings institutions. Savings depositors seem somewhat more liable to spasms of unreasoning fear than the business depositors of commercial banks. In many of the states, savings banks are empowered to require notice of the withdrawal of deposits, and have made use of the power in every period of crisis. But it is a power which is not well understood by the mass of depositors and its exercise has therefore probably done quite as much harm as good. Many depositors look upon the step as an indication of insolvency and refrain from making their customary weekly and monthly additions to their savings accounts. Money is hoarded which in normal times passes from wage-earners into circulation through the channel of the savings banks. This has been an important influence responsible for the dearth of currency which has characterized our successive crises. Savings depositors should be made to understand that the withdrawal of their deposits without notice is a matter of favor. It might be well if a week's notice of with-

of the bill, deposits, received at the several post offices, are to be turned over to the local national banks, but as they are to be payable on demand, no considerable portion of them could be invested in mortgages or other local securities. Moreover, the price of the government guaranty would certainly seem to be excessive. The depositor is to receive the beggarly return of 2 per cent., just half the rate ordinarily paid on savings' deposits by both national and state banks.

drawal were regularly required. Then the longer notice exacted in emergencies would excite less alarm among depositors. The more widely savings institutions are established the more necessary will it become to impress upon depositors the nature of the obligations and investments of the savings bank. State institutions can not be controlled in this matter, but it is to be expected that the expression of this sound principle in national legislation would have a potent influence upon them.

II

We shall now turn our attention to changes in our banking system designed primarily to enable the banks to cope more successfully with crisis conditions. For this purpose it is fortunately not necessary to impose additional burdensome restrictions upon the conduct of the daily operations of the banks. The adoption of such remedies would diminish the profits of the banks and their power to serve the business community, and would also make it even more difficult than at present to compete with state credit institutions. With the exception of 1893, none of our crises has disclosed among any considerable number of the national banks a condition of weakness so extreme as to involve impairment of capital, much less insolvency.[1]

In each of our successive crises the same defects in our banking system have been made manifest. They have been the result not of unsound methods of handling the individual banks but of the imperfect organization of the system. At no time, except

[1] The bank failures of 1893 were largely in the West and Southwest, where economic conditions were so generally unsound that no conceivable restrictions could have shielded the banks from serious trouble.

during periods of acute trade depression, have the banks been in a position to withstand severe strain. Nowhere has there been adequate reserve power to meet emergencies by means of the expansion of loans and the payment of cash in sufficient amount to allay the alarm of depositors. At the outbreak of the crises of 1873 and 1893 the banks were not appreciably less well supplied with cash resources than in the years immediately preceding; and in 1907 the ratio of this part of their reserve to deposit liabilities was considerably above what it had been during a number of the years since the beginning of the century.[1] To require by legislation that all the banks shall have adequate power in reserve for emergencies would be a difficult, even an impossible, undertaking, to say nothing of the burden of expense which it would place upon the banks and consequently upon the community. Proposals for an asset currency, which seem to be designed to bring this about in a less expensive fashion, have failed to secure general favor, largely, it may be surmised, because of the widespread feeling that the banks would exhaust this as they have their other credit resources before an emergency came upon them.

Fortunately a less diffused reserve power is sufficient for the purpose and can be secured by means of more simple and less hazardous arrangements. It is only necessary to insure the maintenance of this power in reserve where the strain of crises is most severe and to make certain that it will be put to use. This is accomplished in other countries through central banks; and were it not for political and economic difficulties, in particular the absence of

[1] In regard to this and other statements of fact regarding our crises the reader is referred to a History of the National Banks during Crises by the writer, which is to be published shortly by The National Monetary Commission.

branch banking, the same result doubtless might be achieved in this country. The exposition of other means more in harmony with our traditions and banking practice will be the concern of the remainder of this paper.

In every country there is a central money market to which is always shifted nearly the entire burden of supporting the credit structure in emergencies. This is obvious in any country in which banking is carried on by a few banks with many branches, since the central offices of such banks are with few exceptions in its chief money center. In the United States with its multitude of independent local banks it is, indeed, less obvious, but it is no less certain that this burden rests upon the central money market of the country, New York City. Some of our crises and panics, like those of 1884 and 1907, began in New York. Others began elsewhere, as, for example, the crisis of 1893, which set in with failures in the West and South. But in all cases the consequent strain was immediately felt in New York with no apparent diminution in violence.

The significance of the New York money market in our banking system is not fully recognized. It is indeed generally understood that the practice of depositing reserves with agents in the money centers places a severe strain upon them in emergencies, and it is well known that the New York banks have acquired a large share of such deposits. The enormous responsibilities resting upon the New York banks on this account will be seen in the following table, which shows the distribution of bankers' deposits among the national banks on September 1, 1909: —

	New York	Chicago and St. Louis	Forty-six Reserve Cities
Number of Banks	38	23	321
Due to National Banks[1] .	$331	$198	$381
Due to Other Banks . . .	346	110	403
Total Bankers' Deposits .	677	308	784
Due from National Banks	49	76	167
Due from Other Banks . .	9	17	60
Net Bankers' Deposits . .	619	215	557
Due from Reserve Agents	——	——	266

The New York banks held about one-third of the total amount of bankers' deposits; and if the more significant obligation of net bankers' deposits is taken, they held more than 43 per cent. of the total. Compared with the banks of Chicago and St. Louis their obligations to bankers were almost three times as great.

And this is not all. From the table it will be observed that the amount due to the banks of Chicago and St. Louis from other national banks was $76,000,000, while in the case of the New York banks it was only $49,000,000. But the total resources of the New York banks are about two and one-half times as large as those of the Chicago and St. Louis banks. A large portion of the amount due to the banks of the two western central reserve cities consists of balances with the New York banks. This is well known, tho no figures of the exact amount of such balances are available. Large New York balances are necessary because New York is the clearing-house of the country. In this connection certain statistics gathered by the Comptroller of the Currency nearly twenty years ago have great significance. From information provided by 3,329 of the 3,438 national banks it was found that in 1890 all but three drew

[1] These and the following items in millions.

drafts upon New York and that the total amount of such drafts was 61.31 per cent. of all the drafts drawn upon all the banks of the country. In the case of the Chicago banks the amount drawn was but 9.82 per cent. of the total. The Chicago banks drew upon New York for $222,000,000 and were drawn upon in return for but $82,000. These figures show very clearly how indispensable is the maintenance of payments by the New York banks if the dislocation of the domestic exchanges is to be avoided. If every bank throughout the country were required to keep its entire reserve in its own vaults the likelihood of suspension in New York would be diminished, but general suspension would be no less certain to follow if that step were taken by the New York banks.

The strain upon the New York banks in emergencies is not limited to the withdrawals of balances by outside banks. Like the central money markets of other countries, New York is the cheapest market for loans in the United States and is consequently resorted to by large borrowers from all sections. For this reason and on account of stock exchange and other financial dealings the demand for loans there is indefinitely large and attracts the surplus funds of the banks of the entire country. Loans of outside banks in New York are apt to be particularly large during those periods of months or even years when conditions are ripening for a crisis, because at such times the rates for loans in money centers always reach abnormally high levels. When a crisis does come, calls from the outside banks for the liquidation of their loans and the shipment of the currency received in payment are invariably even more in evidence than the drawing

[1] See Report of the Comptroller of the Currency, 1891, pp.16–23.

down of balances. The effects are far more disturbing because of the shifting of loans which is involved.[1]

There has been no crisis since the establishment of the national banking system in which the New York banks would have been at all likely to have resorted to suspension had their difficulties been confined to those of purely local origin. In 1873 the situation in New York was so far improved at the time the banks restricted payments that the necessity for it was generally questioned. It was subsequently explained in a clearing-house committee report that the measure was taken on account of the threatened exhaustion of the cash reserves of the banks in response to the demands of the interior banks for the return of their deposits.[2] In 1893 there was nothing in the nature of a panic in New York itself, when this discreditable step was again taken. The banks succumbed to the prolonged drain of money to the West and Southwest, where numerous bank failures had generally weakened public confidence. Again, in the crisis of 1907, at the end of the week in which the troubles of the New York trust companies became known, the local situation was showing such decided evidence of improvement that but for the increased demands of the outside banks it is certain that cash payments would have been maintained. The course of events in all these crises shows plainly the source of weakness in our banking system and the general nature of the remedies which should be adopted. The burden resting upon the New York banks should,

[1] Since the appearance of outside banks as large lenders in the New York money market it has been no longer possible for the clearing house banks to reduce their loans in emergencies. During the last two weeks of October and the first week of November, 1907, the loans of the latter were increased by over $110,000,000.

[2] This illuminating report should be better known. It will be found in the Commercial and Financial Chronicle, November 15, 1873 and in the Bankers' Magazine, December, 1873.

if possible, be lightened and, above all, their ability to endure severe strain should be increased.

Something can be accomplished in the way of diminishing the responsibilities of the New York banks in emergencies; tho perhaps not much, since these responsibilities are an inevitable consequence of the position of the city as the clearing house and money center of the country. We have already seen that the investment of savings deposits in long time loans may be expected to check somewhat the flow of money to New York. This is especially probable in the case of banks in those parts of the West and South where there are still abundant opportunities for the further investment of capital. As it has been precisely from banks of these sections that the demand upon New York in emergencies has been most urgent, the effect of their withdrawal from the New York market would probably be much greater than might be expected, judging solely from the relative magnitude of the funds thus employed.

Something also may be accomplished toward reducing the strain upon New York by a modification of the reserve requirements of the national banking law. The present arrangement with its three classes of banks, or rather of localities, has nothing to recommend it. It has failed whenever it has been subjected to severe test. No bank which holds large bankers' deposits, particularly when these form a part of the reserves of other banks, should be permitted to keep its own reserve anywhere except in its own vaults. There are a number of banks in the reserve cities each of which has acquired upwards of $15,000,000 of bankers' deposits. For these banks to be allowed to keep half of their reserves with central reserve city banks is an arrangement based neither upon business

convenience nor sound principle. It places virtually the entire burden of supporting the credit structure upon the banks of central reserve cities which hold bankers' deposits. Moreover, on account of the deposits and funds employed in New York by the banks of Chicago and St. Louis, this burden rests almost entirely upon the few banks in that city which hold the lion's share of the deposits of other banks.

This unsatisfactory situation can be remedied, in some measure, by a simple change in the present law. It would only be necessary to impose the requirement of a 25 per cent. cash reserve upon any bank wherever situated which should choose to qualify as a reserve agent for other banks. It might also be advisable to limit this power to banks in places with a certain minimum population and with a minimum of capital (which might be placed as high as $500,000 or even $1,000,000). Under this arrangement the distinction between reserve and central reserve cities would disappear. There would be but two classes of banks: local banks which might be established anywhere, and reserve agent banks which might be established in any place having the required minimum population.

It is impossible to formulate any legislation regarding reserve requirements which will be entirely satisfactory. The responsibilities of banks in different localities are not entirely similar, and the responsibilities of the various banks in any one locality are even more diverse. The present law over-emphasizes the importances of differences in localities and even then does not accomplish the end in view. The banks in a city which is a commercial and financial center for the region about it have responsibilities which exceed those of the banks of a city whose business is of a purely local nature. But this difference can not

be determined by the test of population. In those parts of the country in which the population is dense the banks in a city with a comparatively large number of inhabitants may be of little more than local importance. On the other hand, in the agricultural West and South, important centers for commercial and banking business may have a very small population. Aside from a minimum population requirement, the present law leaves to the banks the determination of the rank of each place. The results have been not a little curious. The banks of some important cities like Buffalo, Atlanta, and Memphis have elected to remain country banks. In the Western States, where the rivalry of cities is keen, reserve cities are more numerous. Texas already has six and the state of Washington three.

Under the proposed arrangement opportunity would be given to many individual banks, at scattered points throughout the country, to develop a business which would be profitable to themselves and of service to their localities. The deposited reserves of the country banks would probably not then be found so frequently in a city distant hundreds or even thousands of miles. This was a cause of the temporary suspension of many banks in 1893, and similar mishaps would doubtless have occurred in 1907 if general suspension had not come almost at the very beginning of that crisis. Under the proposed arrangement, further, the heavy responsibility which rests upon those banks which hold bankers' deposits would be more apparent to the general public than it is at present. At the same time it would relieve many banks of a burden which is also a serious obstacle to the growth of banking under the national law in reserve cities. By no means all the banks in the

reserve cities have acquired bankers' deposits. Many of them are engaged in purely local business and do not need larger reserves than local banks elsewhere. Certainly if the present requirement is sufficient for the country banks of Buffalo and Atlanta, it would be adequate for the purely local banks of Boston or San Francisco. That the present arrangement is a serious obstacle to the growth of the national system in reserve cities is certain. With the exception of a few cities in which many national banks were formed after the Civil War, the number of national banks in reserve cities is exceedingly small. There are at present forty-six reserve cities; in two of these (Savannah and Tacoma) there are only two national banks; in nine there are only three; and again in nine there are only four national banks. In most instances a national charter is secured only when the organizers of the bank intend to compete for bankers' deposits. Banks designed for purely local business are organized under state laws.

The effect of the proposed change upon the cash reserves of the banks can not, of course, be determined exactly. It would certainly increase somewhat the required cash holdings of the national banks, taken as a whole, against a given net deposit liability. On September 1, 1909, the three hundred and twelve banks in reserve cities held a cash reserve, including the 5 per cent. fund, of $231,800,000, or 13.5 per cent. of their net deposits. Nearly $200,000,000 in addition would be required if all the banks were to qualify as reserve agents. But it is certain that by no means all of them would qualify, since many of them have little or no bankers' deposits. It would seem to be a safe assumption that not more than two-thirds of the total deposit liability of these banks would belong to

banks which would become reserve agents. Upon this assumption not more than $133,000,000 would be needed. The withdrawal of this sum from the banks in the central reserve cities, by reducing their deposit liabilities, would set free $33,000,000 now held as reserve. It would seem safe, therefore, to assume that about $100,000,000 would be required to carry out this change. This is an amount not much greater than the trust companies of New York City were obliged to accumulate in consequence of state legislation passed after the crisis of 1907. If provision were made for compliance with this requirement over a period of two or three years, it could certainly be carried through with no seriously disturbing consequences.[1]

This estimate of the amount of money required to provide all banks holding bankers' deposits with a 25 per cent. cash reserve would be still further reduced if the banks of the present reserve cities engaged in purely local business were to be assimilated to the country banks for reserve purposes. Moreover, some change in the reserve of most of the country banks would follow the establishment of true savings depart-

[1] Mr. Victor Morawetz has brought forward, in his suggestive volume entitled The Banking and Currency Problem in the United States [second edition, pp. 122–129] a plan for a more thoro-going reconstruction of our reserve system. He proposes a uniform reserve requirement against ordinary deposits for all the banks of the country and a much higher requirement against bankers' deposits. There would be no deposited reserves, so far as the law is concerned. Purely for illustrative purposes, he suggests 10 per cent. against ordinary deposits and 30 per cent. against bankers' deposits. The 10 per cent. requirement would involve the moderate increase of $40,000,000 in the cash reserves of the country banks, and would, of course, reduce the requirement for banks in reserve and central reserve cities. The 30 per cent. requirement against bankers' deposits would be clearly insufficient. With the possible exception of a very few banks in reserve cities total cash requirements would be less than under the present law and very much less in the case of central reserve city banks. It would be necessary to have a reserve of something like 50 per cent. against bankers' deposits in order to strengthen materially the banks of the money centers. The proposal in the text involves far less departure from our existing arrangements and its effects can therefore be more definitely predicted. The purpose of the two proposals is not essentially different.

ments. The present reserve requirement is too high for savings deposits the withdrawal of which is properly safeguarded. The opportunity would, therefore, be provided to increase the cash reserve against deposits payable on demand without imposing an additional burden upon any considerable number of the country banks. The requirement of a cash reserve of 10 per cent. and a deposited reserve of 5 or even 10 per cent. would involve little or no addition either to their present stock of money or to the amount of their deposits with reserve agents. It would simply ensure retention of the existing reserve after the conversion of demand deposits into savings deposits.

This scheme of requirements, it is submitted, is adjusted to the varying responsibilities of the banks as nearly as is possible under legislative provisions which are necessarily more or less rigid in character. It does fail to meet the special responsibilities which rest upon banks in the money centers of the first rank, even tho their business is purely local. The failure of purely local banks in New York may have wide consequence if it disturbs confidence in those banks of the city whose business relations are national in scope. This, however, is an aspect of the situation which would diminish in importance under the proposed arrangement because it emphasizes the responsibilities of banks not by localities but with reference to their position as reserve agents. Finally, it may be observed that in the great cities the banks themselves may be relied upon to ensure the maintenance of proper standards through the clearing house. Some years before the establishment of the national banking system the New York Clearing House Association adopted the rule requiring a 25 per cent. cash reserve, and this rule would doubtless be continued even tho the present law were to be changed.

III

Up to this point we have been considering means of diminishing the strain upon the New York banks through changes which would directly affect the other banks. By means of savings departments a considerable amount of demand deposits would be converted into time deposits and a greater part of the funds of the banks would be employed at home. The proposed change in reserve requirements would increase somewhat the cash reserve of the banks in general without imposing any appreciable burden upon them, and would largely increase the cash reserve of those banks outside the present central reserve cities which hold bankers' deposits. These banks, like those of Chicago and St. Louis, would doubtless carry considerable balances in New York and also employ surplus funds in that market; but their withdrawals of funds from it in emergencies could hardly reach the proportions possible under the present system.

All these various arrangements would avail little, however, if the banks in future emergencies make no more use of their reserves than they did in 1893 or 1907. On those occasions the New York banks resorted to suspension long before their reserves were exhausted. While the power of outside banks to deplete the reserves of the New York banks may be somewhat curtailed, some means for ensuring the effective use of reserves is absolutely essential if we are to escape suspension in future emergencies.

Since the establishment of the national banking system suspension, more or less complete, has been resorted to on three occasions, — in 1873, in 1893, and in 1907. On all these occasions the country banks had increased their cash reserves and the ratio

of their reserves to deposit liabilities during the interval between the outbreak of the disturbance and suspension. The banks of the reserve cities and also those of Chicago and St. Louis, while experiencing some loss in their cash holdings managed to maintain their reserve ratio with almost no change. The showing of the New York banks has been in every instance somewhat more creditable, since they have lost heavily in cash, and their reserve ratio has gone below the 25 per cent. requirement. In the case of the other banks, however, it should be remembered that in suspending payments they were simply following in the wake of the New York banks. When the New York banks suspend, similar action is inevitable elsewhere, at least for all banks whose customers have wide business dealings, because through New York payments are made between different parts of the country. Moreover, there is no reason to believe that the country banks were intending to hoard the money which they withdrew from their reserve agents at the beginning of each of our successive crises. They needed additional supplies of cash if they were to meet the demands of their own depositors. But after the New York banks suspended the country banks naturally held with a tight grip all the money which they had in their possession and also endeavored to extract more from their reserve agents. The fact that the country banks held more cash in December than in August, 1907, is no indication whatever of what their position would have been if the banks in New York had not inaugurated the policy of suspension. Surely it can not be held that the country banks should not withdraw any money from their reserve agents in emergencies. And after suspension the country banks in holding their reserves intact

were following a course exactly similar to that of the city banks. The New Yorks banks themselves in 1907 held a larger reserve at the beginning of December than at the beginning of the previous month.

One of the unfortunate effects of suspension is the creation of seemingly conclusive evidence for its necessity. During the last two months of 1907 cash payments were generally restricted by the banks and, altho an enormous amount of money was added to the supply in the country, none of it was secured by the banks. Through gold imports, government deposits, issues of banknotes, and payments of cash by the banks, something like $300,000,000 was added to the amount of money in every day use or in hoards. Furthermore, a vast amount of substitutes for money was set afloat in the community.[1] It has been assumed that as much as this amount of money, perhaps more, would have been taken from the banks if they had not restricted payments. This view is, however, contrary to experience in every instance where banks have met the demands of depositors fearlessly in an emergency. Suspension increases enormously the propensity to hoard money; it also makes more sluggish the movement of money which is in actual use. We can not be absolutely certain that the New York banks would have been able to maintain payments until calm was restored; but the amount of money which went out of sight after suspension is no indication whatever of the amount which would have been required to maintain cash payments.

Comparison of the course of events during the crisis of 1873 with that in subsequent crises shows a

[1] See the careful estimate by Professor A. P. Andrew, in this Journal, August, 1908.

progressively increasing unwillingness or inability among the New York banks to make use of their cash reserves. In 1873 the New York banks at the outset of the crisis held an available reserve of $34,300,000. In the course of four weeks this was reduced to $5,800,000, and the ratio to deposit liabilities was then less than 4.5 per cent.[1] Suspension was not escaped in 1873 but it was of shorter duration than in later crises. The banks at that time were unable to increase their cash resources by any of the means which have been available in later crises. The government had no surplus of greenbacks, aside from about $12,000,000 which was almost entirely secured and retained by the savings banks. Banknotes could not be issued because the total circulation was at that time limited by law. Finally, additional supplies of gold, secured through imports, were useless for ordinary banking purposes because the business of the country was then carried on by means of an inconvertible and depreciated paper currency. Notwithstanding all these special difficulties, the New York banks, by continuing to use their reserves freely even after payments had been restricted, were able to restore confidence in a comparatively short time, and money began to flow back to them within three weeks after the outbreak of the crisis.

In 1893 the New York banks were in what was for them an unusually strong condition at the beginning of the disturbance, having early in June a cash reserve exceeding 30 per cent. of their net deposits. A succession of banking failures in the West and South led to heavy withdrawals from New York during the

[1] The figures in the text refer to the legal tender holdings of the banks. The banks also held a considerable amount of specie but it was not a free asset, as most of it had been received on special accounts payable in gold. Including the specie holdings the reserve ratio was 12.8 per cent.

latter part of June and the beginning of July. Then followed a lull and money began to be returned to New York. During the third week of July banking failures were renewed in the West and South and the drain was resumed. The positively unfavorable aspects of the situation were altogether similar to those of the previous month with the one further circumstance of a reduced cash reserve in New York. On the other hand, additional means with which to meet the situation were becoming available. At the end of July gold imports in large amount had been arranged. Foreign purchases of our securities were heavy, reflecting increasing confidence in the repeal of the silver purchase law. Arrangements had also been made which would certainly lead to a considerable increase in the issues of banknotes during August and September. Notwithstanding all these favorable circumstances the New York banks suspended, during the first week of August, when they still held a cash reserve of $79,000,000, more than 20 per cent. of their deposit liabilities.

In 1907 the New York banks restricted payments when they still held a cash reserve of more than $220,000,000 and when the reserve ratio was also above 20 per cent. Both in 1893 and in 1907 suspension was not a measure of last resort taken after the banks had entirely exhausted their reserves and when there were no means of securing additional cash resources. Moreover, after cash payments were restricted the policy of the banks was unlike that adopted in 1873, in that the banks did not make further use of their reserves; they hoarded them and added to their amount, thus unduly prolonging the period of suspension.

Explanation of the failure of the banks in 1893 and

1907 to use their cash resources as completely as in 1873 is simple; but it is of the very greatest significance because it will bring to light the most serious element of weakness in our credit structure.

In 1893 and in 1907 the clearing house loan certificate was the only device resorted to in order to secure the adoption of a common policy by the banks. In 1873, as on earlier occasions when its use was authorized, provision was also made for the equalization of the reserves of the banks. Thus in 1873 the Clearing House Association in addition to the customary arrangements for the issue of loan certificates adopted the following resolution: —

> That in order to accomplish the purposes set forth in this agreement the legal tenders belonging to the associated banks shall be considered and treated as a common fund, held for mutual aid and protection, and the committee appointed shall have power to equalize the same by assessment or otherwise at their discretion. For this purpose a statement shall be made to the committee of the condition of such bank on the morning of every day, before the opening of business, which shall be sent with the exchanges to the manager of the Clearing House, specifying the following items: —
>
> (1) Loans and discounts. (2) Amount of loan certificates. (3) Amount of United States certificates of deposit and legal tender notes. (4) Amount of deposits deducting therefrom the amount of special gold deposits.

Two fairly distinct powers were given the clearing house committee: the right to issue clearing house certificates, and control over the currency portion of the reserves of the banks. This machinery was devised (according to tradition) after the crisis of 1857 by George S. Coe, who for more than thirty years was President of the American Exchange National Bank. The purpose of the certificate was to remove certain serious difficulties which had become generally recognized during that crisis. The banks

had pursued a policy of loan contraction which ultimately led to general suspension, because it had proved impossible to secure any agreement among them.[1] The banks which were prepared to assist the business community with loans could not do so because they would be certain to be found with unfavorable clearing-house balances in favor of the banks which followed a more selfish course. The loan certificate provided a means of payment other than cash. What was more important, it took away the temptation from any single bank to seek to strengthen itself at the expense of its fellows, and rendered each bank more willing to assist the community with loans to the extent of its power.

But in addition to the arrangement for the use of loan certificates provision was also made for what was called the equalization of reserves. The individual banks were not of course equally strong in reserves at the times when loan certificates were authorized. From that moment they would be unable to strengthen themselves, aside from the receipt of money from depositors, except in so far as the other banks should choose to meet unfavorable balances in cash. Moreover, withdrawals of cash by depositors would not fall evenly upon the banks. Some would find their reserves falling away rapidly with no adequate means of replenishing them. The enforced suspension of individual banks would pretty certainly involve the other banks in its train. Finally, it would not be impossible for a bank to induce friendly depositors to present checks on other banks directly for cash payment, instead of depositing them for collection and probable payment in loan certificates, through the clearing house. The arrangement for equalizing

[1] C. F. Dunbar, Economic Essays, chap. xvi.

reserves therefore diminished the likelihood of the banks working at cross purposes — a danger which the use of clearing-house certificates alone can not entirely remove.

These arrangements had enabled the banks to pass through periods of severe strain in 1860 and in 1861 without suspension. In both instances the use of the loan certificate was followed immediately by an increase in the loans of the banks, and in no short time by an increase in their reserves. The situation in 1873 was more serious, and as events proved, the reserve strength of the banks, while sufficient to carry them through the worst of the storm, was not enough to enable them to avoid the resort to suspension.

In 1884, the next occasion when clearing-house loan certificates were issued, the opposition to the provision for the equalization of reserves was so widespread that it does not appear that it was even formally considered. The ground for this opposition can be readily understood. In 1873 the practice of paying interest upon bankers' deposits was generally regarded with disfavor. Only twelve of the clearing-house banks offered this inducement to attract deposits; but by this means they had secured the bulk of the balances of outside banks. It was in meeting the requirements of these banks that the reserves of all the banks were exhausted at that time. The non-interest paying banks entered into the arrangement for the equalization of reserve in expectation of securing a clearing-house rule against the practice of paying interest on deposits. But their efforts had resulted in failure. Some of them had employed their reserves for the common good most reluctantly in 1873, and the feeling against a similar arrangement in 1884 was

naturally far stronger and more general. Moreover, the working of the pooling agreement in 1873 had occasioned heart-burnings which had not entirely disappeared with the lapse of time. It was believed, and doubtless with reason, that some of the banks had evaded the obligations of the pooling agreement. It was said that some of the banks had encouraged special currency deposits so as not to be obliged to turn money into the common fund. Further, as the arrangement had not included banknotes, banks exchanged greenbacks for notes in order either to increase their holdings of cash or to secure money for payment over the counter. Here we come upon an objection to the pooling arrangement which doubtless had much weight with the specially strong banks, altho it is more apparent than real. In order to supply the pressing requirements of some banks, others who believed that they would have been able to meet all the demands of their depositors were obliged to restrict payments. That such an expectation would have proved illusory later experience affords ample proof. When a large number of the banks in any locality suspend, the others can not escape adopting the same course. But in 1884 the erroneousness of the belief had not been made clear by recent experience.

The New York banks weathered the moderate storms of 1884 and 1890 without suspension, by means of the clearing-house loan certificate alone, and in the course of time all recollection of the arrangement for the equalization of reserves seems to have faded from the memory of the banking community. There was, moreover, in those years another potent influence which tended to lessen the likelihood of suspension following the issue of loan certificates. Many banks

were unwilling to take them out, fearing that such action would be regarded as a confession of weakness. The prejudice against them was indeed so strong that needed loan expansion did not follow the authorization of their issue. In 1890 the directors of the Bank of Commerce, then, as now, one of the most important banks of the city, passed a resolution urging other banks to relieve the situation by increasing loans and by taking out loan certificates.

In 1893 only a small part of the balances between the banks was settled in certificates at first; but by the end of July practically all balances were settled in that way and suspension followed at once. In 1907 all the banks having unfavorable balances, with but one important exception, took out certificates on the first day that their issue was authorized, and suspension was then for the first time simultaneous with their issue.

The connection between suspension and the use of clearing house loan certificates as the sole medium of payment between the banks is simple and direct. The bank which receives a relatively large amount of drafts and checks on other banks from its customers can not pay out cash indefinitely if it is unable to secure any money from the banks on which they are drawn. So long as only a few banks are taking out certificates and the bulk of payments are made in money, no difficulty is experienced; but as soon as all the banks make use of that medium, the suspension of the banks which have large numbers of correspondents soon becomes inevitable. The contention of bankers both in 1893 and in 1907 that they had not suspended since they had only refused to honor drafts on other banks was untenable. The clearing-house loans certificate was a device which the banks

themselves had adopted and they had failed to provide any means for preventing partial suspension as the result of its use. The further contention of some bankers that they had suspended because they had no money to pay out was doubtless true of a few banks, but for that very reason other banks must have been all the stronger, probably well above their required reserve.

That the arrangement for equalizing the reserves, adopted in 1873, would have availed to prevent suspension on subsequent occasions, is highly probable, indeed a practical certainty. In 1893 events proved that the banks had maintained payments up to the very last of the succession of disasters with the results of which they had been contending. During August the number of bank failures was not large and none of them was of great importance. We cannot, of course, know how soon money would have begun to flow back to New York, but certainly the suspension of payments could hardly have hastened the movement. From the beginning of September the reported movements of currency showed a gain for the New York banks, and for the week ending September 16 the gain was no less than $8,000,000. One month more of drain, therefore, was the most that the banks would have been obliged to endure, and for the needs of that month the banks would not, as in 1873, have been confined to the single resource of the $79,000,000 of the cash in their vaults.[1]

Similarly, the enormous increase in the money supply of the country in November and December, 1907, would have offset much of the loss of reserve which the banks would have incurred, if they had

[1] The increase in the amount of money in circulation for August, 1893, was estimated at $70,000,000.

continued to meet all the demands of their customers for cash. And, finally, it may be observed that in the unlikely event that alarm had not been allayed and suspension in the end had become unavoidable, it would not have made any practical difference to depositors whether the reserves of the banks had been but 10 per cent. rather than 20 per cent. of their demand liabilities.

The probability that the equalization of reserves would have served to prevent suspension in 1893 and also in 1907, brings up the question whether the banks may be expected to resort to the arrangement in an emergency. At first sight it seems unreasonable to expect banks which reap no advantage from bankers' deposits to employ their reserves to meet needs with which they are not directly concerned. On the other hand, all the banks agree upon, and share in the use of, the clearing-house loan certificate. It is a device which enables the banks to meet the demand for loans, and as the loans of the New York banks are principally to local borrowers it is the local situation that is thus relieved. This is the proper policy for banks in any community. But it should not be carried out at the cost of the rest of the community or be allowed to overshadow all other responsibilities. The continuance of loans enables the banks to escape almost inevitable loss from failures of customers through the sudden contraction of credit, and also enables them to earn profits for their share-holders. Individually all the New York banks reap an advantage not only from the clearing-house loan certificate but also from the position of New York as the money center of the country; and anything which undermines its reputation for strength is harmful to all. Finally, profits are not sacrificed when reserves are

equalized, as the reserve is not a source of profit; it is a foundation of credit, and a resource for emergencies. The use of a reserve does not in any way reduce the gains of a bank from its loans or other profitable operations. The objection to equalization is the natural objection to assisting those who should have assisted themselves; it rests upon a sound basis of human experience; but it does not follow that the refusal to co-operate must be absolute. It may be conditional upon amendment. This was the attitude of the more conservative banks in 1873. As often happens, their hopes of amendment were not realized. They proposed an indirect remedy, the prohibition of the payment of interest on bankers' deposits. A more direct remedy would be secured through the insistence by clearing-house authorities and the public that banks holding these highly explosive bankers' deposits should hold larger reserves in normal times than are held by the banks carrying on a purely local business.

It is doubtful whether it is safe to rely upon the voluntary action of the banks to revive the original and essential complement of the clearing-house loan certificate, — the equalization of reserves. Fortunately, the usefulness of loan certificates would be in no way diminished if their issue were made by law conditional upon the adoption of this means of preventing their use leading directly to the suspension of cash payments.

A more formal obstacle to the use of the reserves of the banks in emergencies should also be removed. The present law, in directing banks to discontinue lending operations when their reserves are deficient, works no great inconvenience in normal times, since the loans which are not taken by one bank can be

taken by others. In emergencies, however, when all banks should use their reserves and if necessary go below reserve requirements, the general discontinuance of loans would prove more disastrous than the suspension of cash payments. The Comptroller of the Currency might be given the power to authorize the suspension of this particular provision of the law. The same purpose might be accomplished by permitting the banks to go below reserve requirements upon the payment of a tax high enough to have a deterrent but not a prohibitive effect.[1]

This paper has reached a length which forbids at this time any discussion of certain other aspects of our banking problem, in particular the disposition which should be made of the money of the government, and the banknote question. In the next number of the Journal I intend to consider these as well as certain matters of minor importance. The necessity for some power to extend credit in the form of banknotes as a remedy in times of panic has, in my opinion, been greatly exaggerated and has come to overshadow other and more vital remedies. In any event, it may be added in conclusion, the remedies which have been suggested in these pages would to a very considerable extent strengthen our banking system, leaving a less formidable task to be performed with the assistance of currency devices.

O. M. W. Sprague.

Harvard University.

[1] See the suggestion to this effect by Professor C. W. Mixter, in this Journal, February, 1908.